HYDRAULIC BRAKE BLEEDING

DESCRIPTION

Hydraulic system bleeding is necessary any time air has been introduced into system. Bleed brakes at all four wheels if master cylinder lines have been disconnected or master cylinder has run dry. Bleeding may be done either by using pressure bleeding equipment or by manually pumping brake pedal and using bleeder tubes.

METERING VALVE

On disc brake equipped vehicles, the metering section of combination valve must be deactivated before bleeding. This will allow fluid to front brakes. Disable metering valve by holding valve in open position with a suitable tool, (J-23774-01, American Motors; C-4121, Chrysler Corp.; J-22742 Ford Motor Co.; J-23709, General Motors Exc. Cadillac; J-23770, Cadillac).

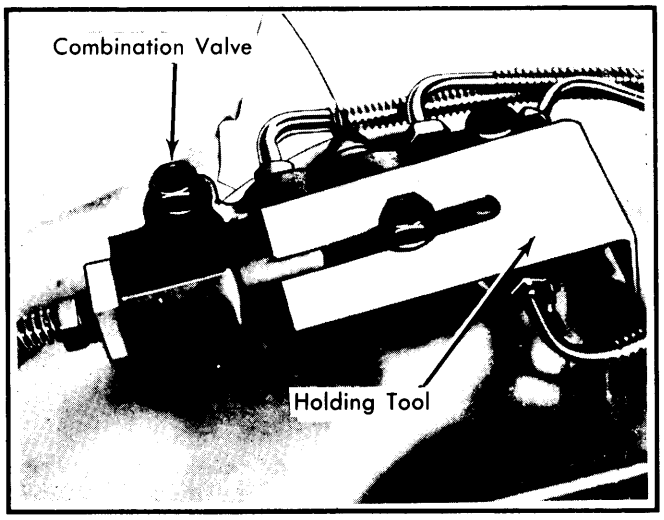

Fig. 1 Deactivating Metering Valve for Bleeding (Typical Method and Tool)

MANUAL BLEEDING

Fill master cylinder, then install bleeder hose to first bleeder valve to be serviced. See *Bleeding Sequence*. Place other end of hose in clean glass jar partially filled with clean brake fluid so end of hose is submerged in fluid. Open bleeder valve ¾ -1 turn. Depress brake pedal slowly through its full travel. Close bleeder valve, then release pedal. Repeat procedure until flow of fluid shows no signs of air bubbles. **NOTE** – *Check fluid level in master cylinder frequently during bleeding to insure air does not enter system.*

PRESSURE TANK BLEEDING

Clean master cylinder cap and surrounding area, then remove cap. With pressure tank at least ⅓ full, connect to master cylinder using suitable adapters. Attach bleeder hose to first bleeder valve to be serviced. See *Bleeding Sequence*. Place other end of hose in clean glass jar partially filled with clean brake fluid so end of hose is submerged in fluid. Open release valve on pressure bleeder. **NOTE** – *Follow equipment manufacturers pressure specifications, except if noted below.* Unscrew bleeder valve ¾ -1 turn noting fluid flow. When fluid flowing from cylinder to cup is free of bubbles, close bleeder valve securely. Bleed remaining cylinders in correct sequence and in the same manner. Remove tool from combination valve.

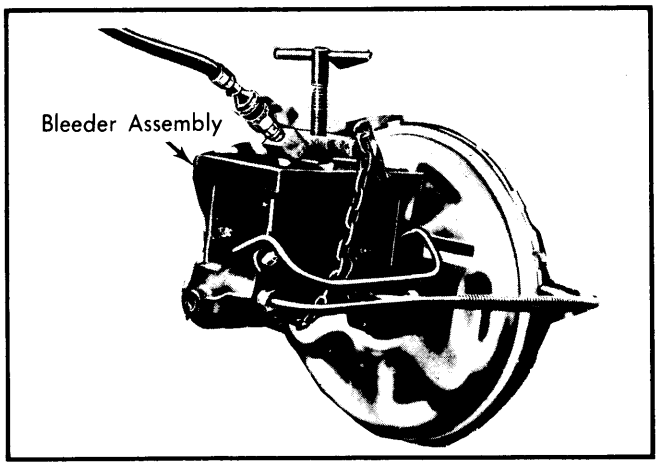

Fig. 2 Pressure Bleeder Installation (Typical)

Pressure Bleeding Pressures

Application	psi
American Motors	15-20
Buick, Chevrolet	①20-25
Oldsmobile, Pontiac	20-25
Cadillac	30
Chrysler Corp.	②35
Ford Motor Co.	10-30

① – Use 20-30 psi on Chevette.
② – Use 25 psi max. on master cyl. with plastic reservoirs.

BLEEDING SEQUENCE

Before bleeding system, exhaust all vacuum from power unit by depressing brake pedal several times. Bleed master cylinder if equipped with bleed screws, then bleed wheel cylinders or calipers in following sequence:

Pressure Bleeding Sequence

Application	Sequence
American Motors	RR, LR, RF, LF
Chrysler Corp.	RR, LR, RF, LF
Ford Motor Co.	Longest Lines First
General Motors	
Chevette	Nearest to Master Cyl. First
Corvette	LR, RR, LF, RF
All Other Models	RR, LR, RF, LF